A NEEDS ASSESSMENT OF RURAL YOUTH SUBSTANCE USE IN WASHINGTON

May 2022 Update

This report is the second part of a two-part needs assessment of rural youth substance use in Washington. In this report, we utilized data from the Washington State Healthy Youth Survey to compare substance use rates, trends, risk and protective factors in rural and non-rural communities in Washington. The purpose of this analysis is to identify factors influencing substance use in rural Washington communities and examine how that is different from non-rural Washington communities. Below are six key findings from this analysis.

KEY FINDINGS

1. Youth marijuana use was higher in rural Washington communities compared to non-rural Washington communities.

→ In rural Washington, 10% of 10th graders currently use marijuana, which is significantly higher than non-rural Washington communities (7%).

2. LGBTQ+ identifying youth in rural Washington have higher rates of marijuana use compared to rural youth overall and non-rural Washington LGBTQ+ identifying youth.

→ Among LGBTQ+ 10th graders in rural communities, 15% currently use marijuana.

→ Rural Washington 10th graders who were bullied because of their perceived sexual identity had a 4 times higher rate of current marijuana use.

3. The biggest protective factor against rural youth marijuana use is a positive adult presence.

→ Rural Washington 10th graders who felt their parents would think it is wrong for them to use marijuana had a 6.5 times lower rate of current marijuana use.

4. The biggest risk factor for rural youth marijuana use is friend's behaviors and attitudes toward drug use.

→ Rural Washington 10th graders who reported having best friends who use marijuana had a 33 times higher rate of current marijuana use.

5. Rural Washington youth reported riding in a car with someone who had been using marijuana at significantly higher rates than non-rural youth.

→ Among rural Washington 10th graders, 14% reported recently riding in a car with a driver who had been using marijuana, which is significantly higher than non-rural Washington (9%).

6. Rural Washington youth reported significantly higher use rates of vapor products.

→ Rural 10th graders in Washington reported significantly higher use rates of vapor products with nicotine (9%) and vapor products with THC (6%) than non-rural Washington 10th graders.

CLARK COUNTY WASHINGTON
PUBLIC HEALTH

PREVENT COALITION RURAL

RURAL SCHOOL DISTRICTS IN WASHINGTON

Legend:
- Rural School Districts
- Non-rural School Districts
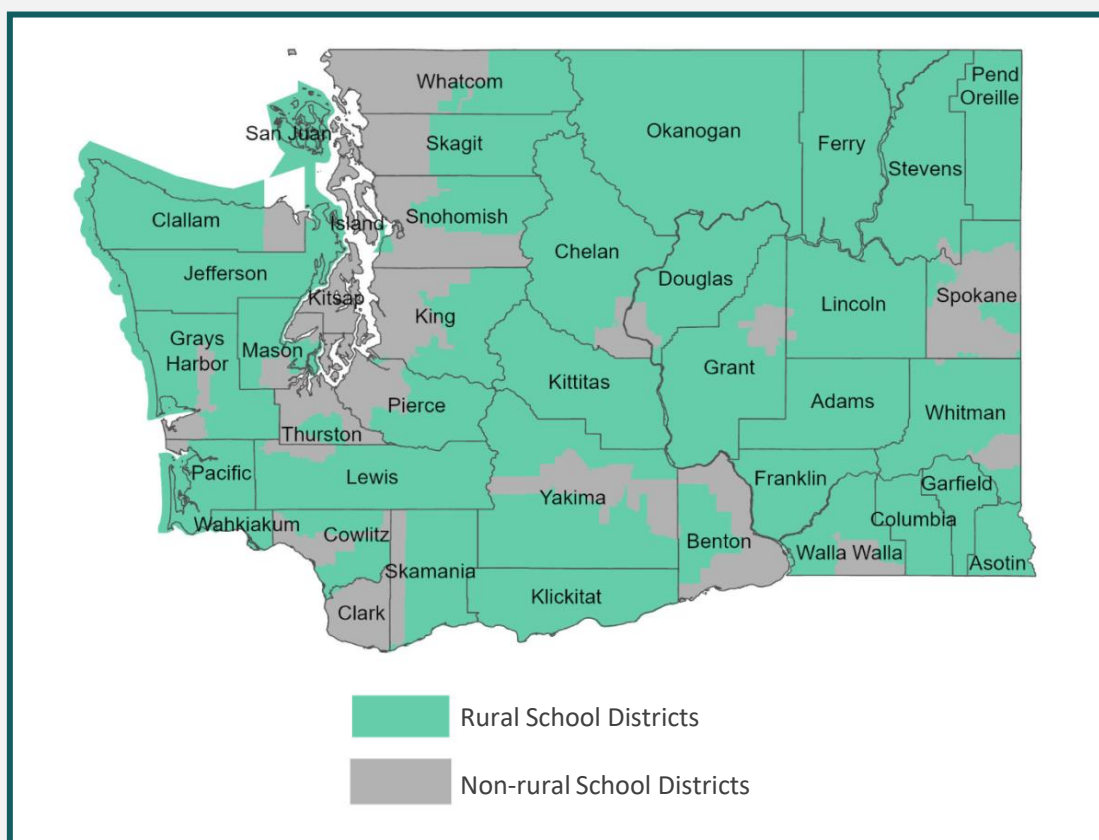
METHODS

Rural communities were defined as school districts that lie within "Small Town/Rural" census designated zip code areas. Small Town/Rural areas represent towns with populations below 10,000 and surrounding commuter areas with more than a one-hour driving distance to the closest city. Zip code rural designations are approximations of the Census tract-based Rural Urban Commuter Area Codes (RUCA). The ZIP code approximations are based on the Census tract codes and are not based on commuting data unique to the ZIP code geographic unit.

School districts were categorized as rural if more than 50% of a school district boundary fell within a Small Town/Rural zip code boundary. This process identified 182 rural school districts in Washington State. A dataset of Healthy Youth Survey data with these rural/non-rural designations in the state sample was provided to Clark County Public Health by the Washington State Department of Health to conduct this analysis. All data in this report comes from the **2021 Washington State Healthy Youth Survey** and utilizes 10th grade data unless otherwise specified.

We acknowledge that some school districts designated as non-rural on the map may classify some or all aspects of their community as rural and vice versa. All analyses conducted for this report compares rural and non-rural communities as highlighted on this map.

CORE MEASURES

Below are core measures for **marijuana**, **vapor products**, **cigarettes** and **alcohol** which are used by most prevention and education grants for reporting and program evaluation purposes.

Substance Use

Measure	Rural WA	Non-rural WA
Used marijuana in the past 30 days	**10.1%***	**6.9%**
Used any vapor products in the past 30 days	**12.5%***	**7.1%**
Used vapor products with nicotine in the past 30 days	**9.1%***	**4.7%**
Used vapor products with THC in the past 30 days	**6.0%***	**3.5%**
Used cigarettes in the past 30 days	**2.7%**	**1.8%**
Drank alcohol in the past 30 days	**10.3%**	**8.2%**
Binge drank in the past two weeks	**8.0%***	**5.2%**

Risk Factors

Measure	Rural WA	Non-rural WA
Have best friends who use marijuana	**32.8%**	**31.5%**
Easy access to marijuana	**32.6%**	**31.5%**
Perceive no/low risk of harm from regular marijuana use (once or twice a week)	**31.1%**	**28.2%**
Friends perceive youth marijuana use as not wrong	**14.3%**	**12.9%**
Perceive no/low risk of harm from regular vaping (almost daily)	**16.1%**	**12.7%**
Perceive no/low risk of harm from heavy cigarette use (pack or more a day)	**9.0%**	**7.8%**
Perceive no/low risk of harm from regular alcohol use (daily)	**22.5%***	**15.9%**
Perceive no/low risk of harm from binge drinking (five or more alcoholic drinks on one occasion, once or twice a week)	**12.5%**	**10.9%**
Perceive no/low risk of harm from misusing prescription drugs	**7.8%**	**6.5%**

Protective Factors

Measure	Rural WA	Non-rural WA
Parents perceive youth marijuana use as very wrong	**75.1%**	**75.7%**
Parental discussion about reasons to not use marijuana	**58.1%**	**58.3%**

Data source: 2021 Healthy Youth Survey (10th grade data)
**significantly different than non-rural*

KEY TRENDS:

Trends in youth substance use and perception of harm from substance use in rural Washington mirror trends in non-rural Washington. **Alcohol** and **cigarette** use have been decreasing, while **marijuana** use remained stable until 2018. All three substances saw significant decreases in 2021. However, it is unclear what effect the COVID-19 pandemic may have had on these differences.

In both rural and non-rural Washington, **the perception of no or low risk of harm from regular marijuana use was increasing among youth until 2018, however may be starting to decrease**. The youth perception of no or low risk of harm from daily alcohol use has been decreasing over the past decade in rural and non-rural Washington, however it remains significantly higher in rural Washington compared to non-rural Washington.

―― Marijuana - NON-RURAL WA	―― Cigarettes - NON-RURAL WA	―― Alcohol -NON-RURAL WA
―● Marijuana - RURAL WA	―● Cigarettes - RURAL WA	―● Alcohol - RURAL WA

Youth perception of no/low risk of harm from regular substance use over time
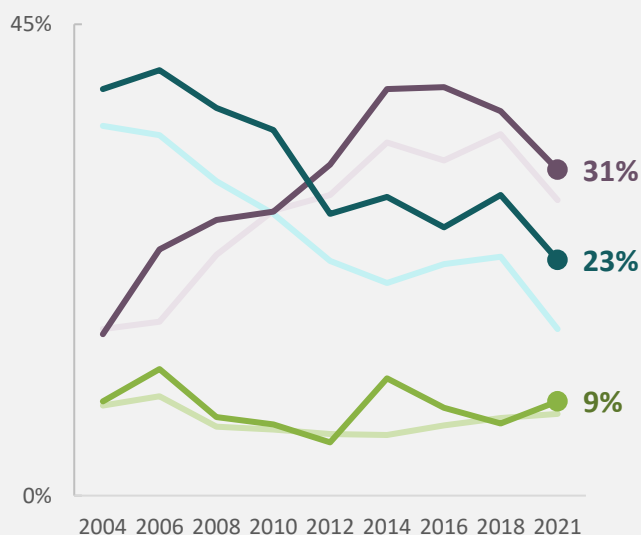
Current substance use over time among 10th graders
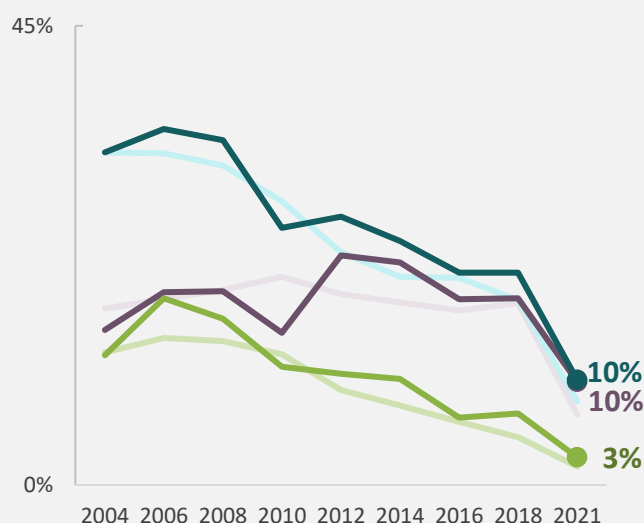
PARENT'S INFLUENCE

Most rural Washington students reported their parents would think it is very wrong for them to smoke cigarettes (86%), use marijuana (75%), or drink alcohol (55%). However, **rural Washington youth were significantly less likely to report their parents thinking it is very wrong for them to drink alcohol than non-rural Washington youth** (63%).

Percent of 10th graders who felt their parents thought it was very wrong for them to use alcohol, marijuana, or cigarettes.

Rural WA	55.3%
Non-rural WA	63.2%
Rural WA	75.1%
Non-rural WA	75.7%
Rural WA	86.4%
Non-rural WA	88.5%
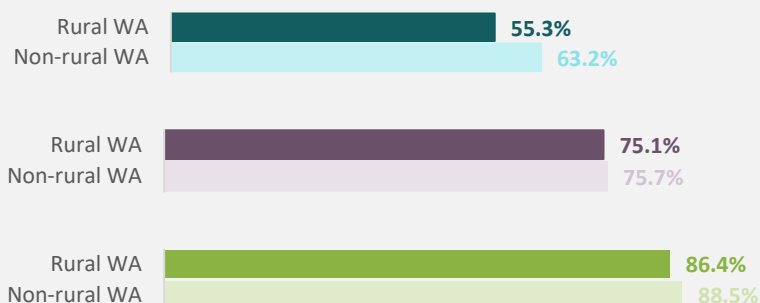
DISPARITIES IN MARIJUANA USE

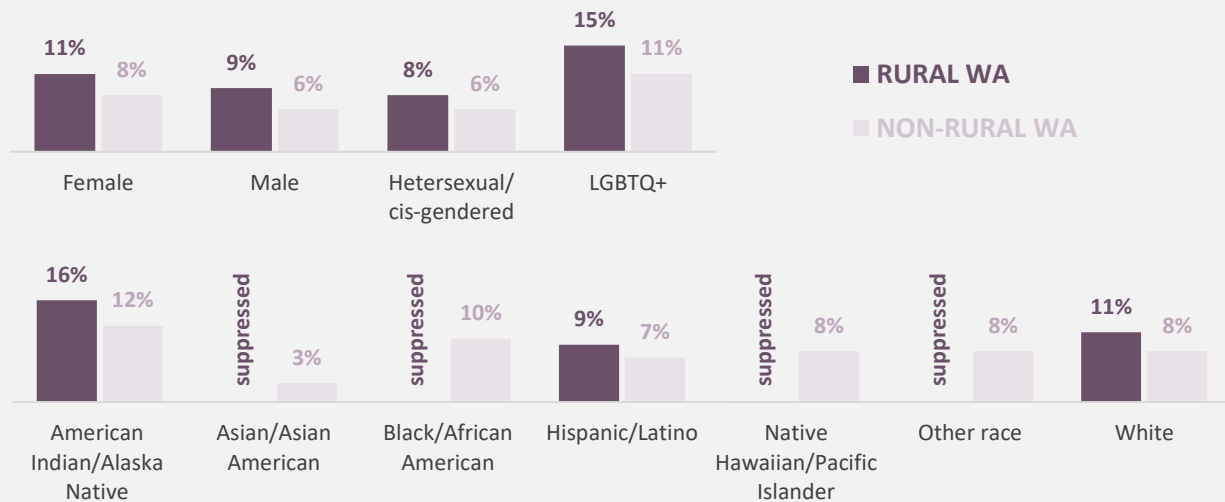**American Indian/Alaska Native and LGBTQ+ youth in rural Washington reported higher rates of current marijuana use than rural students overall (10%)** and higher marijuana use rates than American Indian/Alaska Native and LGBTQ+ youth in non-rural Washington communities. In 2018, male 10th graders reported higher rates of marijuana use in rural and non-rural Washington. However, in 2021 female 10th graders reported higher rates of marijuana use in rural and non-rural Washington.

Rates of current marijuana use among rural and non-rural 10th graders in Washington by demographic characteristics.

Among American Indian/Alaska Native 10th graders in rural Washington, 16% reported using marijuana compared to 12% in non-rural communities. Among LGBTQ+ 10th graders in rural Washington, 15% reported using marijuana compared to 11% in non-rural communities.

In rural Washington communities, 10% of 10th graders currently use marijuana.

Among rural Native American youth,

16%

use marijuana.

Among rural LGBTQ+ identifying youth,

15%

use marijuana.

Notes:
1. *All data are from the 2021 WA Healthy Youth Survey (HYS).*
2. *Race/ethnicity data are not mutually exclusive. Students may identify and be counted within more than one racial/ethnic group in this analysis.*
3. *HYS respondents self report their own gender identity, sexual orientation, and may select any race or ethnicity in which they identify.*

Suppression notes: *Any data with counts less than 10 were suppressed.*
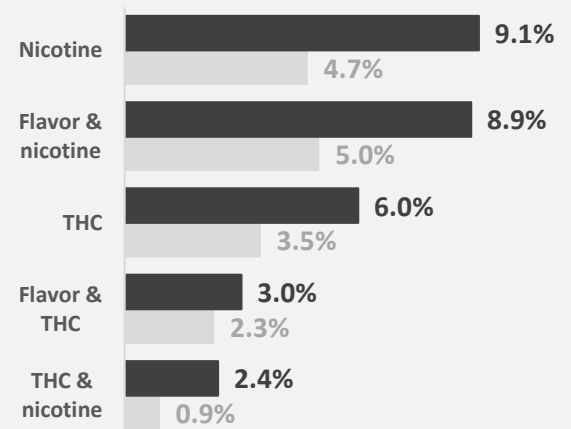
SPECIAL ISSUES

VAPING/E-CIGARETTE USE

Vaping and e-cigarette use among youth is an emerging problem. Among rural Washington 10th graders, the reported rate of current vapor product usage decreased from 2018 to 2021. However, it unclear what effect the COVID-19 pandemic may have had on these decreases. **In 2021, usage of vapor products,** including products with nicotine, flavor and nicotine, THC (a substance found in marijuana), and THC and nicotine, **was significantly higher among rural Washington 10th graders than non-rural Washington 10th graders.**

Current use of any type of vapor product decreased significantly from 2018 to 2021 among rural and non-rural 10th graders.

NON-RURAL WA
RURAL WA

30%

13%
7%

0%

2012   2014   2016   2018   2021
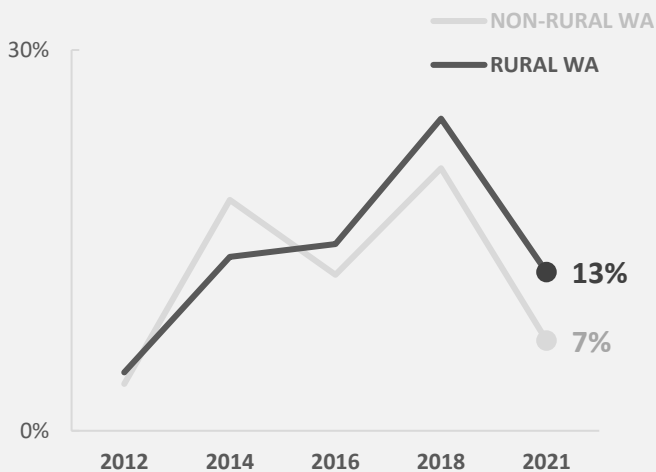
In 2021, the most common substance rural Washington 10th graders reported using in vapor products was nicotine.

Substance	Rural	Non-rural
Nicotine	**9.1%**	4.7%
Flavor & nicotine	**8.9%**	5.0%
THC	**6.0%**	3.5%
Flavor & THC	**3.0%**	2.3%
THC & nicotine	**2.4%**	0.9%

DRIVING UNDER THE INFLUENCE

In rural Washington communities, 10th graders had a significantly higher prevalence of riding in a car (in the past 30 days) that was driven by someone who had been using marijuana (14%) compared to non-rural communities (9%).

Percent of 10th graders who have ridden in a car or other vehicle (in the past 30 days) driven by someone who had been using marijuana

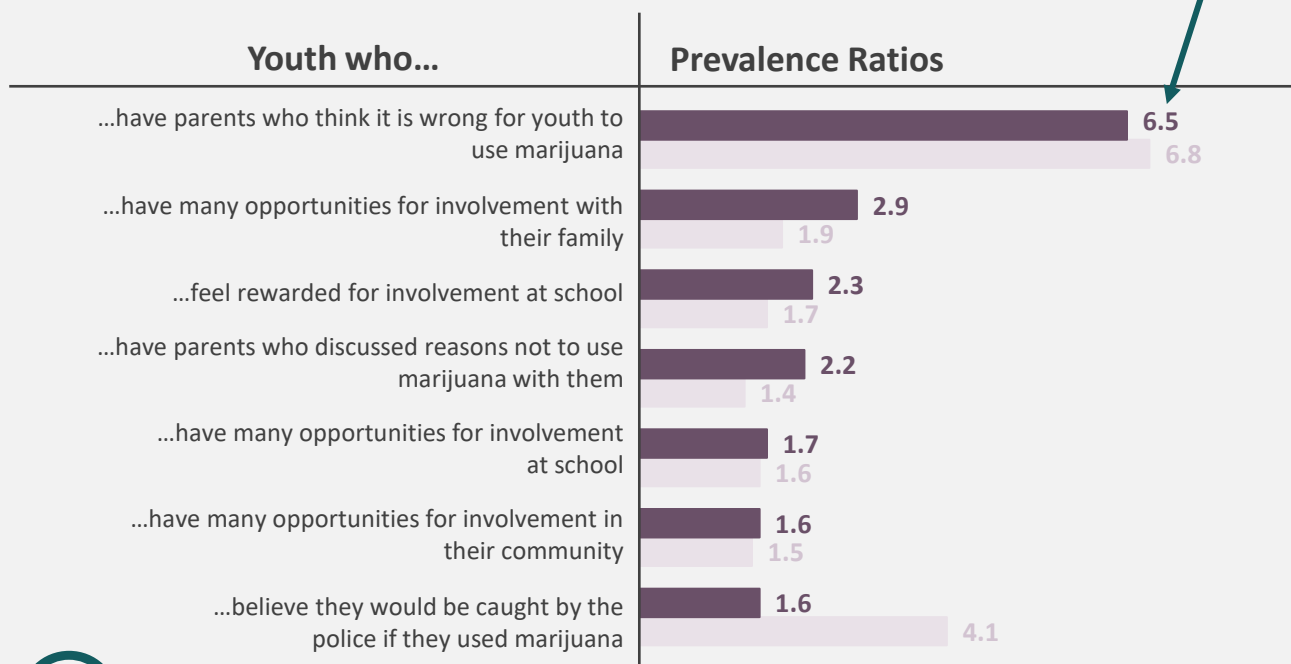|	
RURAL WA	**14%**
NON-RURAL WA	9%

PROTECTIVE FACTORS

A protective factor is something that **LOWERS** the rate of substance use among youth or reduces the negative impact of risk factors that may increase the rate of youth substance use.

Below is a graph of **prevalence ratios** for current marijuana use among 10th graders in rural and non-rural Washington for seven protective factors. Here, a prevalence ratio is a ratio of the prevalence, or rate, of current marijuana use between two groups, for example, youth with parents who think it is wrong for youth to use marijuana and youth with parents who do not think it is wrong for youth to use marijuana. See below for an **example calculation of a prevalence ratio.**

Among rural 10th graders with parents who **do not** think youth marijuana use is wrong…	**45.8%** currently use marijuana.
Among rural 10th graders with parents who think youth marijuana use is wrong…	**7.1%** currently use marijuana.

Prevalence Ratio = 45.8 / 7.1 = **6.5**

The impact of seven protective factors on 10th grade marijuana use in RURAL and NON-RURAL Washington using prevalence ratios

Youth who…	Prevalence Ratios
…have parents who think it is wrong for youth to use marijuana	**6.5** / 6.8
…have many opportunities for involvement with their family	**2.9** / 1.9
…feel rewarded for involvement at school	**2.3** / 1.7
…have parents who discussed reasons not to use marijuana with them	**2.2** / 1.4
…have many opportunities for involvement at school	**1.7** / 1.6
…have many opportunities for involvement in their community	**1.6** / 1.5
…believe they would be caught by the police if they used marijuana	**1.6** / 4.1

What does this mean?

The indicators above were shown to be protective against marijuana use among 10th graders in Washington.

Interpretation example:
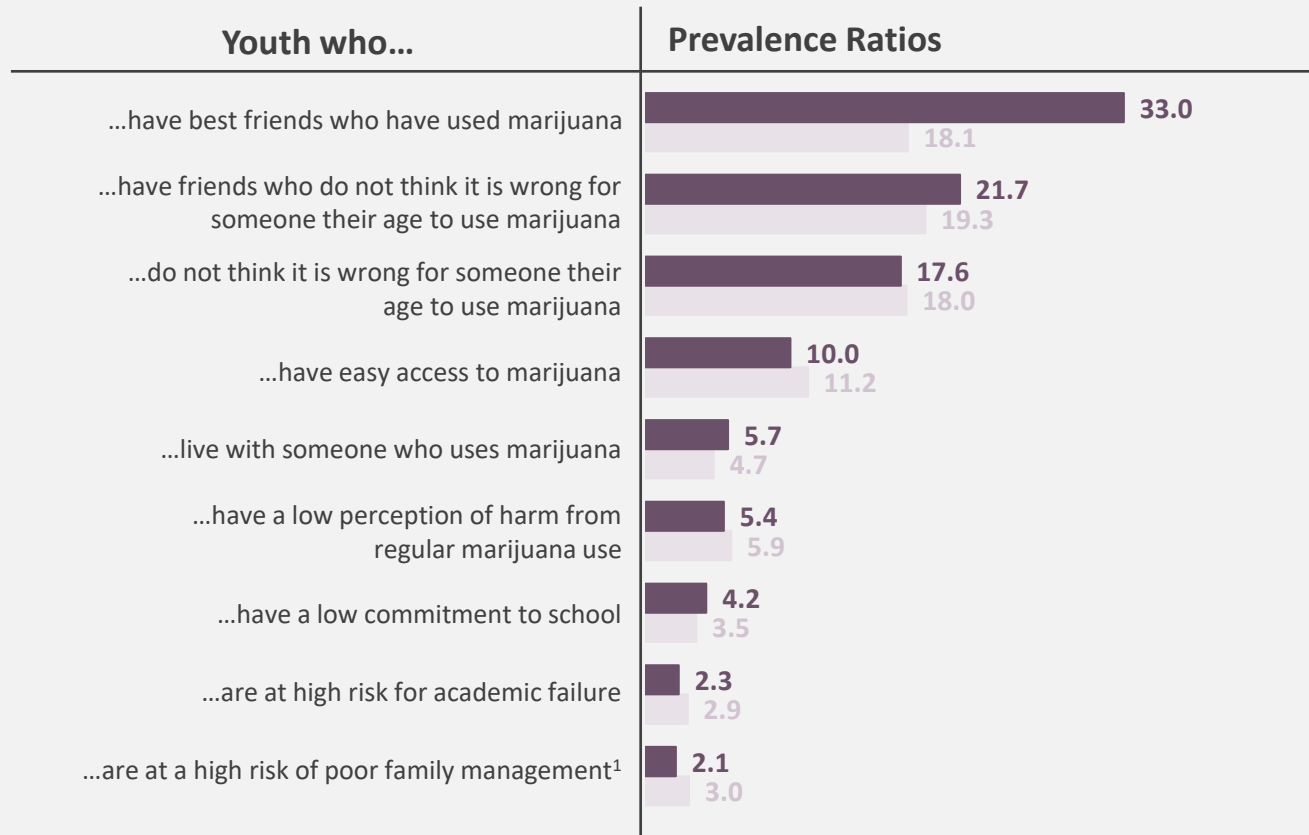Among rural Washington 10th graders, current marijuana use was **6.5 times lower** in those who have parents who think it is wrong for youth to use marijuana than those whose parents do not think youth marijuana use is wrong. Similarly, among non-rural 10th graders, current marijuana use was **6.8 times lower** in those who have parents who think that is wrong for youth to use marijuana.

RISK FACTORS

A risk factor is something that **INCREASES** the rate substance use among youth. Below is a graph of **prevalence ratios** for current marijuana use among 10th graders in rural and non-rural Washington for nine risk factors. Here, a prevalence ratio is a ratio of the prevalence, or rate, of current marijuana use between two groups, for example, youth who have best friends who use marijuana and youth who do not have best friends who use marijuana. **See page 7 for an example calculation of a prevalence ratio**.

The impact of nine risk factors on 10th grade marijuana use in RURAL and NON-RURAL Washington using prevalence ratios

Youth who…	Prevalence Ratios
…have best friends who have used marijuana	33.0 / 18.1
…have friends who do not think it is wrong for someone their age to use marijuana	21.7 / 19.3
…do not think it is wrong for someone their age to use marijuana	17.6 / 18.0
…have easy access to marijuana	10.0 / 11.2
…live with someone who uses marijuana	5.7 / 4.7
…have a low perception of harm from regular marijuana use	5.4 / 5.9
…have a low commitment to school	4.2 / 3.5
…are at high risk for academic failure	2.3 / 2.9
…are at a high risk of poor family management[1]	2.1 / 3.0

What does this mean?

The indicators above were associated with a higher prevalence of current marijuana use among 10th graders in Washington.

Interpretation example:
Among 10th graders in rural Washington, current marijuana use was **33 times higher** in those who have best friends who use marijuana than those who do not have best friends who use marijuana. Among non-rural 10th graders, current marijuana use was **18 times higher** in those who have best friends who use marijuana.

Definitions:
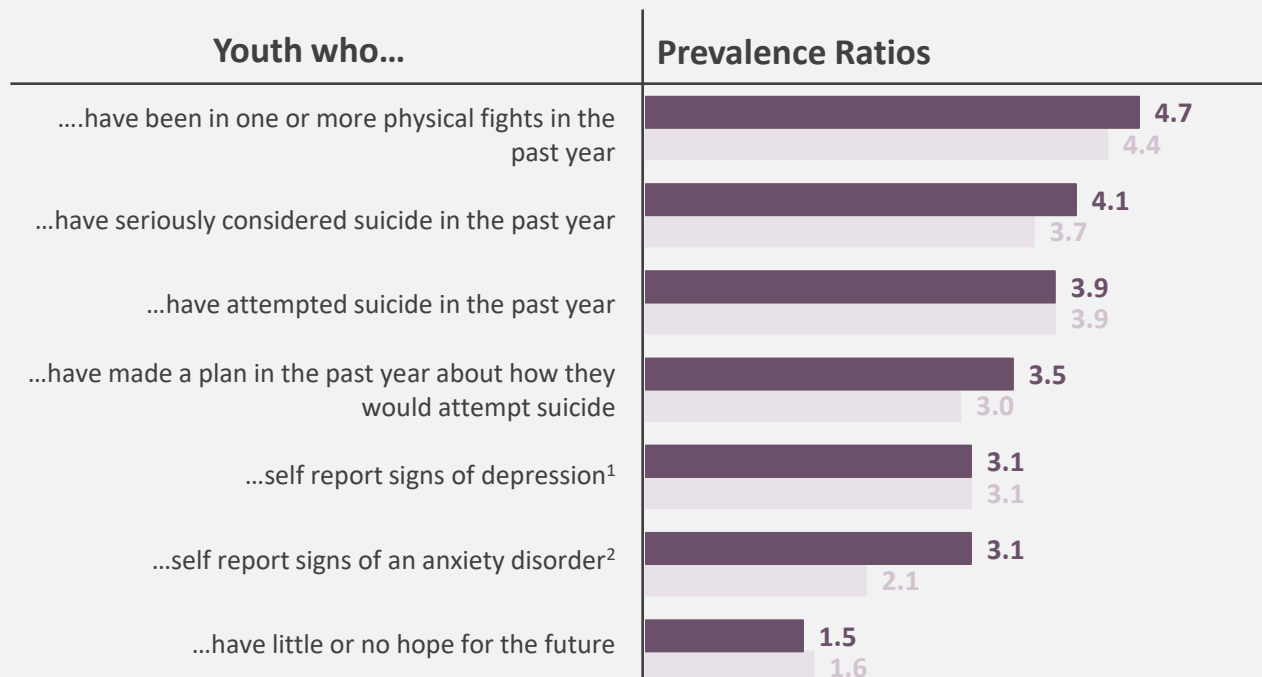1. *High risk for poor family management means youth would not be caught by parents if drinking alcohol, carrying a handgun or skipping school, their family rules around substance use are unclear, their parents do not ask if homework is done, their parents would not know if they did not come home on time, and their parents do not know where they are or who they are with when they are not at home.*

MENTAL HEALTH

Substance abuse and poor mental health are often co-occurring disorders among adults, and studies suggest this is also true among adolescents. Below is a graph of **prevalence ratios** for current marijuana use among 10th graders in rural and non-rural Washington for seven indicators of poor mental health. Here, a prevalence ratio is a ratio of the prevalence, or rate, of current marijuana use between two groups, for example, youth who have attempted suicide in the past year and youth who have not attempted suicide in the past year. **See page 7 for an example calculation of a prevalence ratio**.

The impact of seven indicators of mental health on 10th grade marijuana use in RURAL and NON-RURAL Washington using prevalence ratios

Youth who…	Prevalence Ratios
….have been in one or more physical fights in the past year	4.7 / 4.4
…have seriously considered suicide in the past year	4.1 / 3.7
…have attempted suicide in the past year	3.9 / 3.9
…have made a plan in the past year about how they would attempt suicide	3.5 / 3.0
…self report signs of depression[1]	3.1 / 3.1
…self report signs of an anxiety disorder[2]	3.1 / 2.1
…have little or no hope for the future	1.5 / 1.6

What does this mean?

The above indicators of poor mental health are associated with a higher prevalence of current marijuana use among 10th graders in Washington.

Interpretation example:
Among rural Washington 10th graders, current marijuana use was **4.1 times higher** in those who seriously considered suicide in the past year than those did not consider suicide in the past year. Among non-rural Washington 10th graders, current marijuana use was **3.7 times higher** among those who seriously considered suicide in the past year.

Definitions:
1. *Signs of depression include feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.*
2. *Signs of an anxiety disorder are being unable to stop or control worry, or feeling nervous, anxious or on edge for several days or more in the past two weeks.*
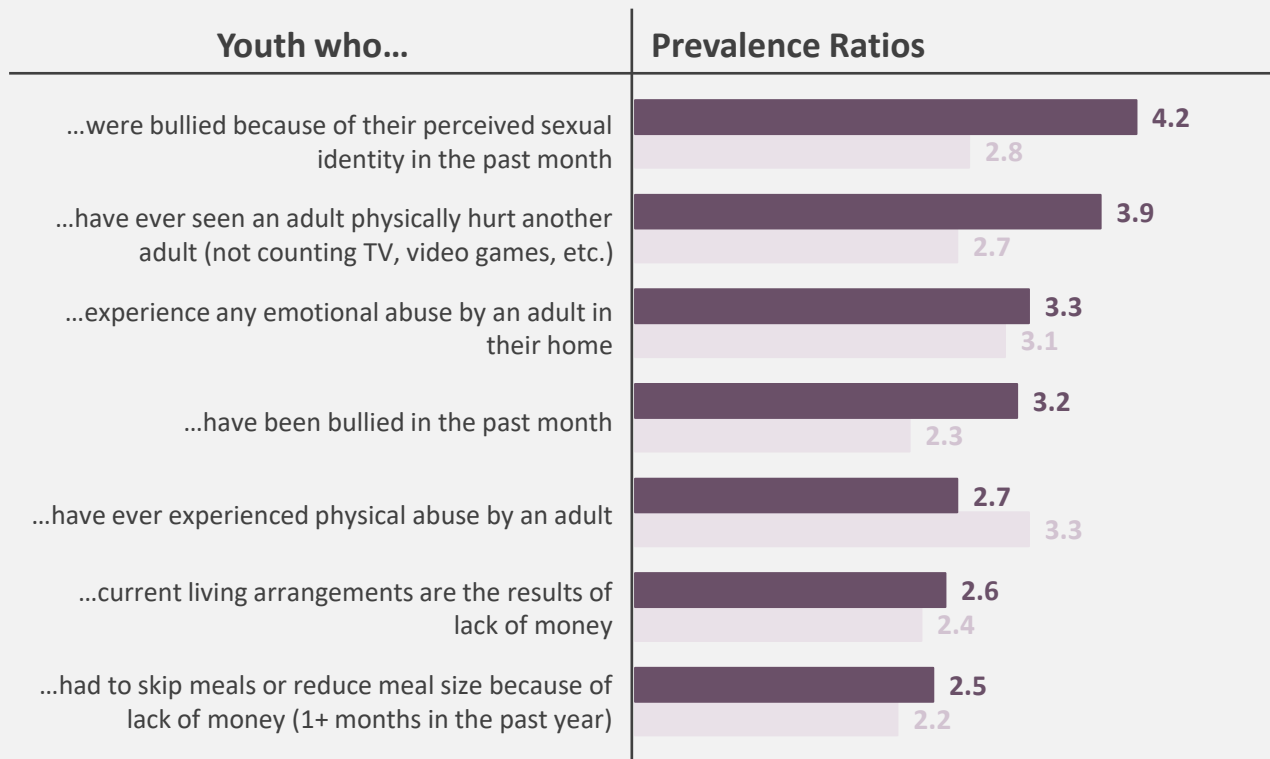
TRAUMA/ADVERSE CHILDHOOD EXPERIENCES (ACEs)

Adverse childhood experiences (ACEs) are threatening or traumatic experiences that occur in childhood, such as physical or emotional abuse, neglect, or household violence. Youth who have experienced one or more ACEs are at an increased risk of using substances. In fact, studies show that the more ACEs someone endures, the higher their risk for substance abuse.

Below is a graph of **prevalence ratios** for current marijuana use among 10th graders in rural and non-rural Washington for seven indicators of childhood trauma. Here, a prevalence ratio is a ratio of the prevalence, or rate, of current marijuana use between two groups, for example, youth who were bullied because of their perceived sexual identity and youth who were not bullied because of their perceived sexual identity. **See page 7 for an example calculation of a prevalence ratio.**

The impact of seven indicators of childhood trauma on 10th grade marijuana use in RURAL and NON-RURAL Washington using prevalence ratios

Youth who…	Prevalence Ratios
…were bullied because of their perceived sexual identity in the past month	4.2 / 2.8
…have ever seen an adult physically hurt another adult (not counting TV, video games, etc.)	3.9 / 2.7
…experience any emotional abuse by an adult in their home	3.3 / 3.1
…have been bullied in the past month	3.2 / 2.3
…have ever experienced physical abuse by an adult	2.7 / 3.3
…current living arrangements are the results of lack of money	2.6 / 2.4
…had to skip meals or reduce meal size because of lack of money (1+ months in the past year)	2.5 / 2.2

What does this mean?

The above indicators of childhood trauma are associated with higher prevalence of current marijuana use among 10th graders in Washington.

Interpretation example:
Among rural Washington 10th graders, current marijuana use was **4.2 times higher** in those who were bullied because of their perceived sexual identity than those who were not bullied because of their perceived sexual identity. Among non-rural Washington 10th graders, current marijuana use was **2.8 times higher** in those who were bullied because of their perceived sexual identity.